

**BRUSH RESOURCES, INC.**  
**Topaz Mine - Delta, Utah**

**Application for Class IIIb Landfill**  
**Permit by Rule**

Prepared by:  
JBR Environmental Consultants, Inc.  
8160 South Highland Drive  
Sandy, Utah 84093

Submitted June 7, 2002  
Re-Submitted July 10, 2002

July 10, 2002

Mr. Dennis Downs  
Utah Division of Solid and Hazardous Waste  
288 North 1460 West  
P.O. Box 144880  
Salt Lake City, Utah 84114-4880

Attention: Mr. Jerry Parkin

**Re: Re-submittal for Application for Permit By Rule for a Class IIIb Landfill**

Dear Mr. Downs:

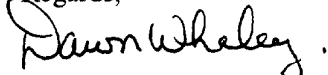
On behalf of Brush Resources, Inc. (Brush), JBR Environmental Consultants, Inc. (JBR) is re-submitting this application for a permit by rule for the existing Class IIIb landfill at the mine site near Delta, Utah. The mine is located about 50 miles west of the mill, which is about 10 miles north of Delta. The mine operates under a current permit from the Utah Division of Oil, Gas, and Mining (DOGM). According to R315-318-2 (b), the mine qualifies to be permitted by rule due to the existence of the current DOGM permit.

On June 26, 2002, I met with Jerry Parkin of your office to discuss the documents Brush needs to submit in order to obtain the permit by rule. Jerry and I reviewed the "Permit By Rule Checklist for Class IIIb Landfill", and, as a result of this review, JBR is submitting all of the necessary information.

Enclosed you will find a modified checklist that addresses each item in the checklist provided by DSHW. You will also find a copy of Brush's Division of Oil, Gas, and Mining permit, the reclamation plan, the financial assurance documents, and the most recent Solid Waste Landfill Annual Report submitted by Brush in February 2002.

If you have any questions regarding this application for a permit by rule for the mine site, please do not hesitate to call either Dan Perry (Brush), at 435-864-1237, or myself at 943-4144.

Regards,



Dawn Whaley  
JBR Environmental Consultants, Inc.

Cc: Dan Perry - Brush



environmental consultants, inc.

8160 South Highland Drive • Sandy, Utah 84093 • (801) 943-4144 • Fax (801) 942-1852

June 7, 2002

Mr. Dennis Downs  
Utah Division of Solid and Hazardous Waste  
288 North 1460 West  
P.O. Box 144880  
Salt Lake City, Utah 84114-4880

**Re: Application for Permit By Rule for a Class IIb Landfill**

Dear Mr. Downs:

On behalf of Brush Resources, Inc. (Brush), JBR Environmental Consultants, Inc. (JBR) is submitting this application for a permit by rule for the existing Class IIb landfill at the mine site near Delta, Utah. The mine is located about 50 miles west of the mill, which is about 10 miles north of Delta. The mine operates under a current permit from the Utah Division of Oil, Gas, and Mining (DOGM). According to R315-318-2 (b), the mine qualifies to be permitted by rule due to the existence of the current DOGM permit.

Attached to this letter are the following documents: Copies of the current DOGM permit, the reclamation plan, the financial assurance documents, and the most recent Solid Waste Landfill Annual report.

If you have any questions regarding this application for a permit by rule, please do not hesitate to call either Dan Perry (Brush), at 435-864-1237, or myself at 943-4144.

Regards,

Dawn Whaley

JBR Environmental Consultants, Inc.

Cc: Dan Perry - Brush

## **1.0 Introduction**

With this modified *Checklist for Class IIIb Landfill, Permit By Rule*, Brush Resources, Inc. (formally Brush Wellman, Inc.) is submitting the enclosed application for Permit By Rule for the mine landfill, in accordance with the State of Utah, Division of Solid and Hazardous Waste's (DSHW) R315-318-2 (b) Rule. The following pages contain: Section I - the current DOGM permit and reclamation plan, Section II - the financial assurance documents, and Section III - the 2002 Solid Waste Annual Landfill Report.

## **2.0 Name and Address of Industry**

Brush Resources, Inc.  
P. O. Box 815  
Delta, Utah 84624

Parent Company:  
Brush Resources, Inc.  
17876 St. Clair Avenue  
Cleveland, Ohio 44110

## **3.0 Regulating Agency Other than Division of Solid and Hazardous Waste**

Utah Division of Oil, Gas, and Mining

## **4.0 Site Location**

Section 8, Range 12 West, Township 13 South, NE ¼ NE ¼, Latitude: 39°42'35" N,  
Longitude: 113°12'54" W

## **5.0 Location Standards of R315-304-4(2)**

Exempt for Class IIIb existing landfills.

## **6.0 Run on/run off controls for a 25 year storm that meet the requirements of R315-305-4(3)**

Refer to Section I, correspondence dated January 7, 1999, between Brush and DOGM. The berms that will be constructed will meet the run on, run off controls for a 25 year storm.

## **7.0 Description of acceptable waste stream and plan to prevent disposal of unacceptable waste**

The landfill accepts only non-hazardous waste and construction and demolition debris that is generated onsite. The debris includes trash and occasional office waste. It is not accessible to the public and controlled by fencing, locked gates, and remoteness of location.

## **8.0 Annual report to up-date status of landfill and report amount of waste disposed**

The 2002 Annual Report is located in Section III.

#### **9.0 Closure – Final cover and revegetation must meet requirements of R315-3-5-5(5)(b)**

Refer to DOGM permit, Section I for final cover and revegetation plan. Final cover will consist of a minimum of 18 inches of fill and a minimum of 6 inches of topsoil. On June 13, 2002, David Whitaker, Bureau of Land Management Office in Fillmore, Utah, recommended the following seed mix and application rate. Seeding will be by broadcast method at a rate of 10 pounds per acre, and seed will consist of:

Indian Rice Grass, variety <i>nezpar</i>	<i>Oryzopsis hymenoides</i>	1.5 lbs
Western Wheat Grass, variety <i>arriba</i>	<i>Agropyron smithii</i>	1.5 lbs
Crested Wheat Grass, variety <i>hycrest</i>	<i>Agropyron cristatum</i>	1.5 lbs
Squirrel Tail	<i>Sitanion hystrix</i>	1.5 lbs
Apar Lewis Flax	<i>Linum lewisii</i>	2.0 lbs
Four Wing Saltbush	<i>Atriplex canescens</i>	2.0 lbs

#### **10.0 Change in record of title as required by R315-302-2(6)**

Brush will, within 60 days after certification of closure, notify the Juab County Recorder to file proof of closure as outlined in R315-302-2(6).

#### **11.0 Post Closure care that generally meets the requirements of R315-302-3(5)**

Brush will provide post closure activities that will include, at a minimum, monitoring of land and water, for a period of 30 years, or as long as the Executive Secretary determines is necessary for the facility or unit to become stabilized and to protect human health and environment.

#### **12.0 Financial assurance that generally meets the requirements of R315-309**

Refer to Section II for the financial assurance documents that are required by DOGM.

**Section I**

**DOGM Permit and Reclamation Plan**



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

January 7, 1999

Greg Hawkins, Mine Manager  
Brush Wellman Inc.  
P.O. Box 815  
Delta, Utah 84624

Re: Conditional Approval of Amendment to Large Mining Operations, Brush Wellman Inc., Topaz Beryllium Mine, M/023/003, Juab County, Utah

Dear Mr. Hawkins:

The Division has completed a review of your permit amendment to the approved Topaz Beryllium Mine mining and reclamation plan, located in Juab County, Utah. The application was originally received August 26, 1998. We hereby grant *conditional approval* of this permit amendment.

The amendment was submitted based upon a required change in mine plan scheduling. The change will result in the enhancement of the mine plan by including some pits which were previously planned to be mined, but where the footprint was originally considered too small to feasibly mine at current day production levels.

As a consequence of this change, the new proposed Rainbow #2 pit will include most of the area involved with the previously approved Rainbow #2 and #3 pits. Similarly, the proposed Section 16 South #1 pit will now include the area of the currently approved Section 16 - North #2 and South #1 pits. The current steady state reclamation surety amount is based on a complex balance sheet of projected mine development activities with concurrent reclamation and release of reclaimed areas. With the development changes proposed in this amendment, this steady state bond amount will be exceeded for an estimated four year period. Eventually annual concurrent reclamation of the disturbed/mined out areas will again catch up with the approved mine development sequence.

Other changes under this amendment will include an overall enhancement of the reclamation plan. As the areas to be mined become better defined, the operator can implement improved land forming and recontouring ideas to improve blending the reclaimed areas into the surrounding topography. The operator has also suggested the use of substitute growth materials (i.e., gravel deposits in the Rainbow expansion area) to enhance reclamation of areas which would normally have had little or no topsoil applied. The gravel should improve soil textures and provide some additional fine soil material which will enhance successful reclamation of disturbed areas. This amendment improves and redefines the existing plan with a more realistic mining scenario and an enhanced reclamation plan.

These areas have been field verified and approved by the Division and are now included as part of the reclamation plan. The following mine plan acreages and surety figures have also been changed:

- Newly proposed disturbed area outside of the original pit boundaries is; 10 acres for the Section 16 - South #1, and 12 acres on the Rainbow #2 for a *total* of 22 acres. The total permitted acreage for the entire mine is 1189 acres.
- \$179,400 (year 2000 dollars) escalated surety amount has been calculated for this amendment. This dollar amount is in addition to the originally approved \$311,300 self bond surety amount. This additional surety will be held by the Division until the concurrent regrading and reclamation activities again balance out with the projected annual mine development sequence. This additional surety amount is acceptable to the Division, BLM, and SITLA and could be posted as a separate surety bond.

An additional \$27,400 reclamation surety amount will also be required for years 2001-2003. This surety will remain in effect until the self bond comes up for review in 2003 (see attached calculation sheets). This additional amount was not contemplated in the initial amendment submitted by Brush Wellman. After we reviewed the original 1988 plan and surety calculations, Brush Wellman was contacted and agreed that an additional \$27,400 surety amount would be acceptable to cover the proposed changes in mining and reclamation scheduling for years 2001-2003. We contacted Ron Teseneer of the BLM and Will Stokes of SITLA and received their concurrence on this supplemental bonding amount. *The self bond will be reevaluated in 2003 and all bonding parameters will be updated at that time.*

The additional adjustments to the existing steady state bond amount are based upon an updated chronological schedule for mining the Rainbow #2 and the Section 16 - South #1 deposits. The original approved permit application anticipated mining these areas, (with the exception of @22 new acres), but under a different development schedule.

As a result of these scheduling changes and the need for additional ore earlier than anticipated, the reclamation costs are reflected differently in terms of the years in which they are encountered. Attached is Table 8.0-1 "*Projected Reclamation Liability Incurrence and Release Dates, updated August 1998*" and Table 8.0-2 "*Cumulative Reclamation Liability with Data from Updated Table 8.0-1.*" Both of these tables show the maximum liability to occur in the year 2000 at \$295,000. These tables are also the source of the information used to calculate the excess surety over and above the self bond. It is our understanding that appropriate archeological and threatened and endangered (T & E) plant clearances have been obtained for any new disturbances proposed on federal and state lands.

Brush Wellman will need to formally notify us of its acceptance to the additional bonding requirements for the years 2001-2003. You do not need to post the supplemental \$27,400 (year 2001-2003) surety amount at this time. However, before we can grant final approval of this amendment, we will need to receive the additional \$179,400 surety and complete an updated Reclamation Contract form.



Page 3

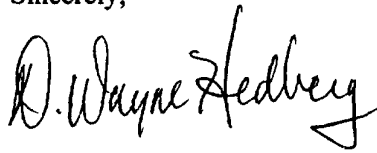
Greg Hawkins

M/023/003

January 7, 1999

As always, our approval does not grant permission to proceed ahead with this amendment without first obtaining the required permits or approvals from all appropriate federal, state and local regulatory entities. If you have any questions in this regard please contact me or Tom Munson of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,



D. Wayne Hedberg  
Permit Supervisor  
Minerals Regulatory Program

jb

Attachments: Calculation sheet; tables 8.0-1 & 8.0-2, Brush bonding calculations;  
DOGM 1988 bonding figures (2); Map (plate 2.0-1C);  
Forms MR-6 and MR-RC

cc: Will Stokes, SITLA  
Ron Tessner, BLM  
Mary Ann Wright, DOGM w/o attachments  
m23-03.rev

# Work Completed

1991 Section 16 N #1	Construct Pit Berm	\$ 200.00	1992 (1)
	1991 Total	\$ 200.00	
<del>1993-1996</del> Monitor #4 #3 Pit	Construct Pit Berm	\$ 200.00	<del>1994-1998</del>
Monitor Dump	Topsoil 1/3 Dump	\$ 66,800.00	<del>1994-1998</del>
	Reveg 1/3 Dump	\$ 13,200.00	<del>1997-2001</del>
	<del>1993-1996 Total</del>	<del>\$ 80,200.00</del>	
<del>1994-1996</del> Blue Chalk S N #2 Pit	Construct Pit Berm	\$ 200.00	<del>1995-1998</del>
	1994 1996 Total	\$ 80,400.00	
<u>2000/2001</u>			
<del>1998</del> Rainbow #1 Pit	Cover Tuff Disposal Cell	\$ 2,950.00	<del>2001</del>
	Reveg Backfilled Pit	\$ 5,050.00	<del>2004</del>
<del>1997</del> Rainbow #2 Pit	Construct Pit Berm	\$ 200.00	<del>2001-1998</del>
Rainbow Dump	Rip 1/2 Dump Top	\$ 5,800.00	<del>2004-2019</del>
	Reveg 1/2 Dump	\$ 8,400.00	<del>2004-2022</del>
Expanded Dump	Rip Dump Top	\$ 3,400.00	<del>2004</del>
	Reveg Dump	\$ 4,924.00	<del>2004</del>
<del>1998</del> Sec 16 S #1 Pit	Construct Pit Berm	\$ 200.00	<del>2001-2006</del>
Sec 16 N #1 & 2	Construct Pit Berm	\$ 400.00	<del>2001-2006</del>
Sec 16 N #1 & 2 & S #1	Topsoil 4/3 63% Backfilled Pit	\$ 27,027.00	<del>2001-1999</del>
	Reveg 4/3 63% Backfilled Pit	\$ 5,481.00	<del>2004-2002</del>
Sec 16 Dump	Topsoil 4/3 37% Dump	\$ 47,654.00	<del>2001-1999</del>
	Topsoil Remainder 2001 Dump	\$ 81,143.00	<del>2010</del>
	Reveg 4/3 37% Dump	\$ 9,074.00	<del>2004</del>
	Reveg Remainder 2001 Dump	\$ 15,451.00	<del>2013</del>
<del>1998</del> Blue Chalk S #2 Pit	Cover Tuff Disposal Cell	<del>\$ 4,900.00</del>	<del>2017</del>
	Reveg Backfilled Pit	<del>\$ 8,800.00</del>	<del>2020</del>
	<del>1998- Incurred but not reclaimed</del>		
	<del>until 2000/2001 Total</del>	<del>\$ 217,154.00</del>	
2004 Roadside/Fluro #4 Pit	Construct Pit Berm	\$ 100.00	2005
Roadside I&II	Topsoil 1/2 Backfilled Pit	\$ 28,900.00	2005
	Reveg 1/2 Backfilled Pit	\$ 9,600.00	2008
Roadside/Fluro Pit	Cover Tuff Disposal Cell	\$ 7,100.00	2008
	2004 Total	\$ 45,700.00	
2004 2005 Monitor #2 Pit	Construct Pit Berm	\$ 100.00	2005 2002
Monitor Dump	Topsoil 1/3 Dump	\$ 66,800.00	2006 2002
	Reveg 1/3 Dump	\$ 13,200.00	2009 2005
2002 Blue Chalk N S #2 Pit	Construct Pit Berm	\$ 200.00	2003
2005 Sec 16 Dump	Topsoil 1/3 Backfilled Pit	<del>\$ 14,300.00</del>	2006
	Reveg 1/3 Backfilled Pit	<del>\$ 2,900.00</del>	2009
	Topsoil 1/3 Dump	<del>\$ 59,800.00</del>	2006
	Reveg 1/3 Dump	<del>\$ 11,400.00</del>	2009
	2005 Total	<del>\$ 88,600.00</del>	

TABLE 8.0-1 PROPOSED RECLAMATION, LIABILITY INCURRENCE  
AND RELEASE DATES

2008 Fluro #2 Pit	Construct Pit Berm	\$ 100.00	2009
Fluro #1 Pit	Cover Tuff Disposal Cell	\$ 1,300.00	2008
	Reveg Backfilled Pit	\$ 2,000.00	2011
Roadside I&II	Topsoil 1/2 Backfilled Pit	\$ 28,900.00	2009
1 Roadside I&II (cont.)	Reveg 1/2 Backfilled Pit	\$ 9,600.00	2012
	2008 Total	\$ 38,600.00	
2009 Sec 16 S #2 Pit	Construct Pit Berm	\$ 100.00	2010
Sec 16 Dump	Topsoil 4/3 63% Dump	\$ 54,191.00	2010
	Reveg 4/3 63% Dump	\$ 10,319.00	2013
	Topsoil 4/3 37% Backfilled Pit	\$ 15,873.00	2010
	Reveg 4/3 37% Backfilled Pit	\$ 3,219.00	2013
	2009 Total	\$ 83,702.00	
2012 Rainbow #3 Pit	Construct Pit Berm	\$ 200.00	2013
<del>2000</del> 2000			
Rainbow Dump	Rip 1/2 Dump Top	\$ 5,800.00	20042019
	Reveg 1/2 Dump	\$ 8,400.00	2004-2022
	2012 Total	\$ 14,400.00	
2013 Blue Chalk N #3 Pit	Construct Pit Berm	\$ 100.00	2014
<del>1998</del> Blue Chalk N #2 Pit	Cover Tuff Disposal Cell	\$ 4,900.00	2017
	Reveg Backfilled Pit	\$ 8,800.00	2020
	2013 Total	\$ 100.00	
2016 Monitor #3 #1 Pit	Construct Pit Berm	\$ 200.00	2017
Monitor Dump	Topsoil 1/3 Dump	\$ 66,800.00	2017
	Reveg 1/3 Dump	\$ 13,200.00	2020
	2016 Total	\$ 80,200.00	
2017 Blue Chalk S #3 Pit	Construct Pit Berm	\$ 200.00	2018
	2011 Total	\$ 200.00	
2020 Camp #1 Pit	Construct Pit Berm	\$ 300.00	2021
Camp Dump	Topsoil Dump	\$ 62,900.00	2021
	Reveg Dump	\$ 14,700.00	2024
	2020 Total	\$ 77,900.00	
2024 Southwind #1 Pit	Construct Pit Berm	\$ 400.00	2025
Southwind Dump	Topsoil Dump	\$ 72,300.00	2025
	Reveg Dump	\$ 18,900.00	2028
	2024 Total	\$ 91,600.00	
2030 Sec 16 N #3	Construct Pit Berm	\$ 100.00	2031
	2030 Total	\$ 100.00	

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8/26/1998

Table 8.0-2 Cumulative Reclamation Liability

With Data From Updated Table 8.0-1

Year	Increased Liability	Released Liability	Actual Released Liability	Year Total	Cumulative Total	Adjustments Per 1998 Plan			Cumulative Total
						Incurrence	Release	Revised Total	
	Per 1988 Plan	Per 1988 Plan	Per BWI, 1998		Per 1988 Plan				Per BWI, 1997
1988	196,800	15,800	15,800						\$ 181,000
1988 (post reclamation)	181,000	0	0	181,000	181,000	\$ (19,300)	\$ -	\$ 161,700	\$ 161,700
1989	0	20,400	20,400	-20,400	160,600	\$ -	\$ -	\$ (20,400)	\$ 141,300
1990	0	3,000	3,000	-3,000	157,600	\$ -	\$ -	\$ (3,000)	\$ 138,300
1991	200		0	200	157,800	\$ -	\$ -	\$ 200	\$ 138,500
1992	0	58,500	58,500	-58,500	99,300	\$ -	\$ -	\$ (58,500)	\$ 80,000
1993	80,200	2,300	2,300	77,900	177,200	\$ (80,200)	\$ -	\$ (2,300)	\$ 77,700
1994	200	67,000	0	-68,800	110,400	\$ (200)	\$ (67,000)	\$ -	\$ 77,700
1995	0	11,700	11,500	-11,700	98,700	\$ -	\$ (200)	\$ (11,500)	\$ 68,200
1996	0	0	0	0	110,400	\$ 80,400	\$ -	\$ 80,400	\$ 148,600
1997	200	13,200	0	-13,000	85,700	\$ (200)	\$ (13,200)	\$ -	\$ 146,600
1998	102,200	5,000	5,000	97,200	182,900	\$ (102,000)	\$ 63,400	\$ (68,200)	\$ 78,400
1999	0	74,100	0	-74,100	108,800	\$ -	\$ (74,100)	\$ -	\$ 78,400
2000	0	0		0	108,800	\$ 217,100	\$ -	\$ 217,100	\$ 295,500
2001	80,200	14,500		65,700	174,500	\$ (80,200)	\$ 77,100	\$ (91,600)	\$ 203,900
2002	200	81,300		-81,100	93,400	\$ -	\$ (81,200)	\$ 100	\$ 204,000
2003	0	200		-200	93,200	\$ -	\$ -	\$ (200)	\$ 203,800
2004	45,700	10,100		35,600	128,800	\$ -	\$ 38,400	\$ (2,800)	\$ 201,000
2005	88,600	42,200		48,400	175,200	\$ (8,300)	\$ (13,100)	\$ 51,200	\$ 252,200
2006	0	74,400		-74,400	100,800	\$ -	\$ (7,600)	\$ (66,800)	\$ 185,400
2008	38,600	31,000		7,600	108,400	\$ 3,300	\$ 1,300	\$ 9,600	\$ 195,000
2009	88,500	43,500		45,000	153,400	\$ (4,800)	\$ (1,100)	\$ 41,300	\$ 236,300
2010	0	74,900		-74,900	78,500	\$ -	\$ 73,500	\$ (148,400)	\$ 87,900
2011	0	20,800		-20,800	57,700	\$ -	\$ 8,400	\$ (29,200)	\$ 58,700
2012	14,400	9,800		4,600	62,300	\$ (14,400)	\$ -	\$ (9,800)	\$ 48,900
2013	100	15,200		-15,100	47,200	\$ 13,700	\$ 14,500	\$ (15,900)	\$ 33,000
2014	0	2,900		-2,900	44,300	\$ -	\$ -	\$ (2,900)	\$ 30,100
2016	80,200	0		80,200	124,500	\$ -	\$ -	\$ 80,200	\$ 110,300
2017	200	74,900		-74,700	49,800	\$ -	\$ -	\$ (74,700)	\$ 35,600
2018	0	1600		-1,600	48,200	\$ -	\$ -	\$ (1,600)	\$ 34,000
2019	0	5,800		-5,800	42,400	\$ -	\$ (5,800)	\$ -	\$ 34,000
2020	77,900	22,000		55,900	98,300	\$ -	\$ -	\$ 55,900	\$ 89,900
2021	0	64,200		-64,200	34,100	\$ -	\$ -	\$ (64,200)	\$ 25,700
2022	0	8,400		-8,400	25,700	\$ -	\$ (8,400)	\$ -	\$ 25,700
2024	91,600	14,700		76,900	102,600	\$ -	\$ -	\$ 76,900	\$ 102,600
2025	0	72,700		-72,700	29,900	\$ -	\$ -	\$ (72,700)	\$ 29,900
2028	0	18,900		-18,900	11,000	\$ -	\$ -	\$ (18,900)	\$ 11,000
2030	100	0		100	11,100	\$ -	\$ -	\$ 100	\$ 11,100
2031	0	100		-100	11,000	\$ -	\$ -	\$ (100)	\$ 11,000
2037	0	11,000		-11,000	0	\$ -	\$ -	\$ (11,000)	\$ -

DATE: FEB 5 1981

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

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APR 27 1981

DIVISION OF  
OIL, GAS & MINING

NOTICE OF INTENTION TO REVISE MINING OPERATIONS

1. Name of Applicant or Company: Brush Wellman Inc.  
a corporation

2. Address: 17876 St. Clair Avenue  
Cleveland, Ohio 44110

3. Name and title of person representing Company:

Kenneth R. Foulson  
Vice President  
Mining and Exploration

Address: 67 West 2950 South  
Salt Lake City, Utah 84115

Office Phone: 467-5441

5. Location of Operations:

Juab County

Sec. 32 T. 12 S., R. 12 W.  
Sec. 5 T. 13 S., R. 12 W.  
Sec. 6 T. 13 S., R. 12 W.  
Sec. 7 T. 13 S., R. 12 W.  
Sec. 8 T. 13 S., R. 12 W.  
Sec. 9 T. 13 S., R. 12 W.  
Sec. 16 T. 13 S., R. 12 W.

6. Name of Mine: Topaz Mining Property

7. Mineral to be mined: Beryllium Mining Method: Open-Pit

8. Have you or any person, Partnership or Corporation associated with you, received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein?

No

Owner/Owners of record of the surface area within the land to be affected:

Bureau of Land Management, Richfield District, House Range  
Resource Area  
Address: P.O. Box 768, Richfield, Utah 84701

State of Utah, Dept. of Natural Resources, Division of State Lands  
231 East 400 South, Salt Lake City, Utah 84111

10. Owner/Owners of record of minerals to be mined:

Brush Wellman Inc.  
Address: 17876 St. Clair, Cleveland, Ohio 44110

Rochester & Pittsburgh Coal  
Address: Indiana, Pennsylvania 15701

Automation Industries, Inc.  
Address: 1901 Building, Century City, Los Angeles, California 90067

Sidney S. Searle, et al.  
Address: Orem, Utah 84057

Richard D. Moody and Jean A. Moody  
Address: Delta, Utah 84624

State of Utah - Division of State Lands  
Address: 231 East 400 South, Salt Lake City, Utah 84111

11. Owner/Owners of record of all other minerals within any part of the land affected: Same as above (10)

1a. Have the owners been notified in writing? YES

2. Source of Operator's legal right to enter and conduct operations on land covered by the Notice

- (1) The Laws of the United States - Mining Act of 1872
- (2) State of Utah, Utah State Mineral Leases
- (3) Corporate and Individual Mining Lease Agreements

13. Approximate Acreage to be distributed:

Mining operation area (include operations, storage and disposal area):

Access Road or Haulageway:	<u>550 - 600</u>	acres+
Drainage System:	<u>10 - 15</u>	acres+
	<u>-0-</u>	acres+
Total acres:	<u>560 - 615</u>	acres+

Give the names and post office addresses of every principal Executive, Officer, Partner, (or person performing a similar function) of Applicant:

Henry G. Piper, Chairman of the Board, Chief Executive Officer and President.

Address: 17876 St. Clair Avenue, Cleveland, Ohio 44110

Raymond A. Foos, Corporate Vice President and President, Beryllium Products Group

Address: Same as above

Clark G. Waite, Corporate Vice President, Finance and Secretary

Address: Same as above

15. Has Applicant, any Subsidiary or Affiliate or any Person, Partnership, Association, Trust or Corporation controlled by or under common control with Applicant, or any Person required to be identified by Item 14, ever had an approval of a Notice of Intention withdrawn or has surety relating thereto ever been forfeited? NO

CITY OF Utah  
COUNTY OF Salt Lake

I, Kenneth E. Poulson, having been duly sworn  
depose and attest that all of the representations contained in the  
foregoing application are true to the best of my knowledge; that I  
am authorized to complete and file this application on behalf of  
the Applicant and this application has been executed as required  
by law.

Signed: *Kenneth E. Poulson*

Taken, subscribed and sworn to before me the undersigned  
authority in my said county, this 3 day of February,  
1981.

Notary Public: *William B. Gray*

My Commission Expires: 8/22/81

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides  
as follows:

"Information relating to the location, size,  
or nature of the deposit and marked confidential  
by the operator shall be protected as confidential  
information by the Board and the Division and not  
be a matter of public record in the absence of a  
written release from the operator, or until the  
mining operation has been terminated as provided  
in subsection (2) of section 40-8-21."

Is confidential information contained herein?

YES *KEP* (Initial)

NO \_\_\_\_\_ (Initial)



Sections desired to be maintained as confidential information:

Section 13; Plate 1 "Topaz Mining Properties;" Plate 2 *Y/1*

"Primary and Secondary Road System Topaz Area;" Plate 3 *Y/1*

"Cross-section Spoils Area" *Y/1*



SCOTT M. MATHESON  
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON  
Executive Director,  
NATURAL RESOURCES

CHARLES R. HENDERSON  
Chairman

CLEON B. FEIGHT  
Director

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

JOHN L. BELL  
C. RAY JUVELIN  
THADIS W. BOX  
MAXILIAN A. FARBMAN  
EDWARD T. BECK  
E. STEELE MCINTYRE

April 7, 1981

Mr. Kenneth R. Poulson  
Vice President  
Mining and Exploration  
Brush Wellman, Inc.  
67 West 2950 South  
Salt Lake City, Utah 84115

RE: Topaz Mining Property  
ACT/023/003  
Juab County, Utah

Dear Mr. Poulson:

The Division of Oil, Gas and Mining has reviewed Brush Wellman's revised mining and reclamation plan for its Topaz Mining Property in Juab County and finds that the plan remains in concert with the Utah Mined Land Reclamation Act. As you know, tentative approval for this operation was issued on March 22, 1977 and the notices of publication were made on April 6 and April 14, 1977 as required to solicit public comment. An environmental assessment was presented to the State Environmental Coordinating Committee for comment and subsequently was signed off on May 16, 1977. It is the Division's opinion that the revised plan does not constitute a significant change in the original filing and that republication is not necessary.

In order that final approval may be granted, a surety must be posted by Brush Wellman to cover the estimated cost of reclamation. As we discussed during our meeting of February 3, 1981, it would be very helpful in estimating the amount of surety for the Division to have additional information regarding the mining sequence and areas to be utilized during five year increments. A color coded surface facilities map should satisfactorily fulfill this request, along with a breakdown of the acreages involved.

Mr. Kenneth R. Poulson

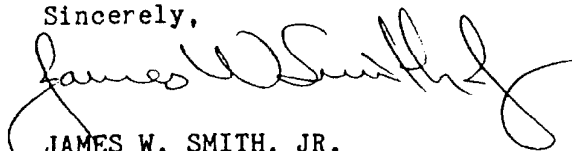
April 7, 1981

Page Two

As soon as we can reach a mutually acceptable amount and form of surety, the Division will present the arrangement to the Board for its approval. Upon receipt of the surety, the Division can issue final approval to Brush Wellman for its Topaz Mining Property.

If you have any question, please call.

Sincerely,



JAMES W. SMITH, JR.

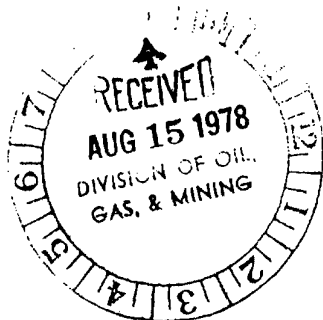
COORDINATOR OF MINED LAND DEVELOPMENT

JWS/te

cc: Bill Wray,  
VanCott, Cornwall, Bagley & McCarthy

Don Pendleton,  
B.L.M., Richfield

John Blake, State Lands



Mine: Topaz Mining Property  
File No: ACT/023/003

Submitted by:  
Applicant BRUSH WELLMAN INC.

Representative Kenneth R. Poulson

Address 67 West 2950 South  
Salt Lake City, Utah  
84115

Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Re: Commitment to Rule M-10

Gentlemen:

I hereby commit the applicant to comply with Rule M-10, "Reclamation Standards" in its entirety, as adopted by the Board of Oil, Gas and Mining on March 22n 1978.

The applicant will achieve the reclamation standards for the following categories as outlined from Rule M-10 on all areas of the land affected by this mine, unless a variance is granted in writing by the Division.

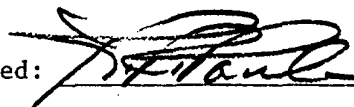
<u>Rule</u>	<u>Category of Commitment</u>
M-10(1)	Land Use
M-10(2)	Public Safety & Welfare
M-10(3)	Impoundments
M-10(4)	Slopes
M-10(5)	Highwalls
M-10(6)	Toxic Materials
M-10(7)	Roads and Pads
M-10(8)	Drainages
M-10(9)	Structures & Equipment
M-10(10)	Shafts and Portals
M-10(11)	Sediment Control
M-10(12)	Revegetation
M-10(13)	Dams
M-10(14)	Soils

I believe a variance is justified on a site-specific basis for the following subsections of Rule M-10 for reclamation on this mine and have enclosed as an attachment to this letter a narrative statement setting forth a description of the extent of the variance request and factual reasons for said variance request.

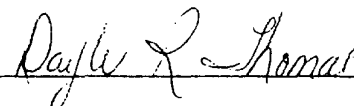
<u>Rule</u>	<u>Category of Variance Request (Narrative Attached)</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

STATE OF UTAH  
COUNTY OF SALT LAKE

I, Kenneth R. Poulson, having been duly sworn depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed: 

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 14<sup>th</sup> day of August, 19 78.

Notary Public: 

My Commission Expires:

MY COMMISSION EXPIRES JULY 10, 1982

Scott M. Matheson

~~Scott M. Matheson~~  
Governor



OIL, GAS, AND MINING BOARD

GUY N. CARDON  
Chairman

N E. HARMSTON

Executive Director,  
NATURAL RESOURCES

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

CLEON B. FEIGHT  
Director

CHARLES R. HENDERSON  
ROBERT R. NORMAN  
J. DANIEL STEWART  
HYRUM L. LEE

RECEIVED

APR 27 1981

DIVISION OF  
OIL, GAS & MINING

March 22, 1977

Brush Wellman Inc.  
Kenneth R. Poulson, Mining Division Manager  
67 West 2950 South  
SLC, Utah 84115

Re: ACT/023/003  
Tentative Approval

Dear Mr. Poulson:

We have reviewed your Mining and Reclamation Plan for the Topaz Mining Property and it is our opinion that this operation, as presently described in the plan, is in concert with the Utah Mined Land Reclamation Act. Therefore, we hereby issue tentative approval of this Mining and Reclamation Plan on this date.

We will now publish an abbreviated version of the plan and during the mandatory 30 day waiting period for public comment we will calculate a surety estimate based on the information presented by you in your plan. You will be asked to comment on our surety estimate before we present it to our Board.

We extend our sincere appreciation to you and your co-workers for you full cooperation in this matter and we look forward to working with you in the future.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Brian W. Buck

BRIAN W. BUCK  
ENGINEERING GEOLOGIST

/tlb

DATE: \_\_\_\_\_



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS

1. Name of Applicant or Company: Brush Wellman Inc.  
a corporation
2. Address: 17876 St. Clair Avenue  
Cleveland, Ohio 44110
3. Name and title of person representing Company:  
Kenneth R. Poulson  
Mining Division Manager
4. Address: 67 West 2950 South Office Phone: 467-5441  
Salt Lake City, Utah 84115
5. Location of Operations:  
  
Juab County  
  
Sec. 32 T. 12 S., R. 12 W.  
Sec. 5 T. 13 S., R. 12 W.  
Sec. 6 T. 13 S., R. 12 W.  
Sec. 8 T. 13 S., R. 12 W.  
Sec. 9 T. 13 S., R. 12 W.  
Sec. 16 T. 13 S., R. 12 W.
6. Name of Mine: Topaz Mining Property
7. Mineral to be mined: Beryllium Mining Method: Open-Pit
8. Have you or any person, Partnership or Corporation associated with you, received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein?

No

9. Owner/Owners of record of the surface area within the land to be affected:

Bureau of Land Management, Salt Lake District, West Desert  
Address: 125 So. State, Salt Lake City

State of Utah, Dept. of Natural Resources, Division of State Lands  
Address: State Capitol, Salt Lake City

10. Owner/Owners of record of minerals to be mined:

Brush Wellman Inc.  
Address: 17876 St. Clair, Cleveland, Ohio 44110

Rochester & Pittsburgh Coal  
Address: Indiana, Pennsylvania 15701

Automation Industries, Inc.  
Address: 1901 Building, Century City, Los Angeles, California 90067

Sidney S. Searle, et al  
Address: Orem, Utah 84057

State of Utah - Division of State Land  
Address: State Capitol Building, State Land

11. Owner/Owners of record of all other minerals within any part of the land affected: Same as above (10)

- 11a. Have the owners been notified in writing? YES

12. Source of Operator's legal right to enter and conduct operations on land to be covered by the Notice

- (1) The Laws of the United States - Mining Act of 1872
- (2) State of Utah, Utah State Mineral Leases
- (3) Corporate and Individual Mining Lease Agreements

13. Approximate Acreage to be distributed:

Mining operation area (include operations, storage and disposal area):

	<u>500 - 550</u>	acres+
Access Road or Haulageway:	<u>10 - 15</u>	acres+
Drainage System:	<u>-0-</u>	acres+
Total acres:	<u>500 - 550</u>	acres+



14. Give the names and post office addresses of every principal Executive, Officer, Partner, (or person performing a similar function) of Applicant:

Robert W. Biggs, Chairman of the Board and Chief Executive Officer  
Address: 17876 St. Clair Avenue, Cleveland, Ohio 44110

Henry G. Piper, President  
Address: Same as Above

Dr. Raymond Foos, Sr. Vice President  
Address: Same as Above

Leslie W. Wiles, Vice Chairman  
Address: Same as Above

15. Has Applicant, any Subsidiary or Affiliate or any Person, Partnership, Association, Trust or Corporation controlled by or under common control with Applicant, or any Person required to be identified by Item 14, ever had an approval of a Notice of Intention withdrawn or has surety relating thereto ever been forfeited? NO

STATE OF UTAH

COUNTY OF SALT LAKE

I, Kenneth R. Poulson, having been duly sworn depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge, that I am authorized to complete and file this application on behalf of the applicant and this application has been executed as required by law.

Signed: \_\_\_\_\_

Kenneth R. Poulson

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 15 day of March, 19 77.

Notary Public: \_\_\_\_\_

*Ray Johnson*

COMMISSION EXPIRES  
FEBRUARY 21, 1981

My Commission Expires: \_\_\_\_\_

**Section II**

**Financial Assurance**

FORM MR-RC  
Revised January 7, 1989  
RECLAMATION CONTRACT

File Number \_\_\_\_\_

Effective Date \_\_\_\_\_

Other Agency File Number \_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION of OIL, GAS and MINING  
1594 West North Temple Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
(801) 538-5291  
Fax: (801) 359-3940

RECLAMATION CONTRACT

---ooOoo---

For the purpose of this RECLAMATION CONTRACT the terms below are defined as follows:

"NOTICE OF INTENTION" (NOI): (File No.)  
(Mineral Mined)

M/023/003  
Bertrandite

"MINE LOCATION":  
(Name of Mine)  
(Description)

Topaz Mining Properties  
Section 31 & 32, T12S R12W SLBM  
Section 4, 5, 6, 7, 8, 9, 10, 16 and 17  
T12S, R12W SLBM

"DISTURBED AREA":  
(Disturbed Acres)  
(Legal Description)

1189.0 Plus 22.0 Additional  
(refer to Attachment "A")

"OPERATOR":  
(Company or Name)  
(Address)

Brush Wellman Inc.  
P.O. Box 815  
Delta, UT 84624

(Phone)

435/864-2701

**"OPERATOR'S REGISTERED AGENT":**

(Name)

(Address)

(Phone)

**"OPERATOR'S OFFICER(S)":**

**"SURETY":**

(Form of Surety - Attachment B)

Self Bonding and Indemnity Agreement

Supplemental surety Bond

**"SURETY COMPANY":**

(Name, Policy or Acct. No.)

N/A

**"SURETY AMOUNT":**

(Escalated Dollars)

Maximum Escalated Bonding Requirements 1988 Revision 311,300  
"Supplemental" Bonding Requirements 1998 Amendment 179,400  
Maximum Escalated Bonding Requirements 1998 Amendment 490,700

**"ESCALATION YEAR":**

?

2004 (Letter Dec 21, 1988)

**"STATE":**

State of Utah

**"DIVISION":**

Division of Oil, Gas and Mining

**"BOARD":**

Board of Oil, Gas and Mining

**ATTACHMENTS:**

A "DISTURBED AREA":

B "SURETY":

This Reclamation Contract (hereinafter referred to as "Contract") is entered into between Brush Wellman Inc. the "Operator" and the Utah State Division of Oil, Gas and Mining ("Division").

WHEREAS, Operator desires to conduct mining operations under Notice of Intention (NOI) File No. M/023/003 which has been approved by the Utah State Division of Oil, Gas and Mining under the Utah Mined Land Reclamation Act, Sections 40-8-1 et seq., Utah Code Annotated, (1953, as amended) (hereinafter referred to as "Act") and implementing rules; and

WHEREAS, Operator is obligated to reclaim that area described as the Disturbed Area as set forth and in accordance with Operator's approved Reclamation Plan, and Operator is obligated to provide surety in form and amount approved by the Division, to assure reclamation of the Disturbed Area.

NOW, THEREFORE, the Division and the Operator agree as follows:

1. Operator agrees to conduct reclamation of the Disturbed Area in accordance with the Act and implementing regulations, the original Notice of Intention dated February 3 1981, and the original Reclamation Plan dated same. The Notice of Intention as amended, and the Reclamation Plan, as amended, are incorporated by this reference and made a part hereof. Revised  
March 8, 1989
2. Concurrent with the execution hereof, Operator has provided surety to assure that reclamation is conducted, in form and amount acceptable to the Division. Such surety as evidenced by the Surety Contract is in the form of the surety attached hereto as Attachment B and made a part hereof. The Surety Contract shall remain in full force and effect according to its terms unless modified by the Division in writing. If the Surety Contract expressly provides for cancellation, then, within 60 days following the Division's receipt of notice that the Surety Company intends to cancel the Surety Contract, the Operator shall provide a replacement Surety Contract in a form and amount reasonably acceptable to the Division. If the Operator fails to provide an acceptable replacement Surety Contract, the Division may order the Operator to cease further mining activities and to begin immediate reclamation of the Disturbed Area.
3. Operator agrees to pay legally determined public liability and property damage claims resulting from mining to the extent provided in Section 40-8-7(1)(e) of the Act.
4. Operator agrees to perform all duties and fulfill all reclamation requirements applicable to the mine as required by the Act and implementing rules, the Notice of Intention, as amended and the Reclamation Plan, as amended.
5. The Operator's liability under this Contract shall continue in full force and effect until the Division certifies that the Operator has reclaimed the Disturbed Area in accordance with the Act and implementing rules, the Notice of Intention, as amended and the Reclamation Plan, as amended.
6. If reclamation of discrete sections of the Disturbed Area is completed to the satisfaction of the Division, and the Division finds that such sections are severable from the remainder of the Disturbed Area, Operator may request the Division to certify that Operator has reclaimed such discrete sections of the Disturbed Area in accordance with the Act and implementing rules, the Notice of Intention, as amended and the Reclamation Plan, as amended. If the Division makes such certification, Operator may make request to the Division that the aggregate face

## ATTACHMENT "A"

BRUSH WELLMAN INC.

TOPAZ MINING PROPERTY

Operator

Mine Name

M/023/003

JUAB

County, Utah

Permit Number

### The legal description of lands to be disturbed is:

Rainbow #2: the NW1/4, NE1/4, SW1/4, and SE1/4 of the NW1/4 of Section 9 in T13S, R12W, SLM.

Section 16 S#1: the NE1/4 and the SE1/4 of the NW1/4 and in the NW1/4 and SW1/4 of the NE1/4 of Section 16 in T13S, R12W, SLM.



Norman H. Bangerter  
Governor  
Dee C. Hansen  
Executive Director  
Dianne R. Nielson, Ph.D.  
Division Director

(Exhibit 2)  
State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

December 21, 1988

Mr. Kenneth Poulson  
Vice President  
Mining and Exploration  
Brush Wellman Incorporated  
67 West 2950 South  
Salt Lake City, Utah 84115

*Ken*  
Dear Mr. Poulson:

Re: Reclamation Bonding, Topaz Mine, M/023/003, Juab County, Utah

Thank you for meeting with us last Tuesday, December 20, 1988. As discussed during our meeting, the revised bond amount for the current 15 year period will be \$311,300. This is based on the following:

Maximum cumulative liability (15 years) and 10% Supervision Cost	\$201,200
10% Contingency	\$ 20,100
Escalation at 2.3% per year	<u>\$ 90,000</u>
Total	<u>\$311,300</u>

This amount covers the first 15 year period from 1988 until the year 2004. The bond would be revised each 15 year period, using the same formula.

We look forward to working with you further in completing the bonding, and finalizing your permit application.

Sincerely,

*Lowell P. Braxton*  
Lowell P. Braxton  
Administrator  
Minerals Resource Development  
and Reclamation Program

jb  
MN5/55



(February 1986)

NONCOAL

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
3 Triad Center, Suite 350  
355 West North Temple  
Salt Lake City, Utah 84180-1203  
(801) 538-5340

SELF BONDING AND INDEMNITY AGREEMENT

This Self Bonding and Indemnity Agreement (hereinafter referred to as "Agreement") entered into by Brush Wellman Inc. (hereinafter referred to as "Brush") and the state of Utah, Department of Natural Resources, Board of Oil, Gas and Mining (hereinafter referred to as "Board"),

WITNESSETH:

WHEREAS, Brush has obtained Permit

D. M/023/003 from the Division of Oil, Gas and Mining to operate the Topaz Mine in Juab County, Utah as a(n) open-pit beryllium mine under the Mined Land Reclamation Act, Utah Code Annotated, 40-8-1 et seq, 1953, as amended ("Act") and implementing regulations; on the premises specifically described in EXHIBIT A; and

WHEREAS, Brush wishes to obtain a bond to operate a(n) Open-pit beryllium mine under Permit No. M/023/003 under 40-8-14(3); and

WHEREAS, Brush has designated Kenneth R. Poulson, Vice-President, Mining & Exploration, Brush Wellman Inc.

(Name, Title, Address)

7 West 2950 South, Salt Lake City, UT 84115

as its agent for Service of Process in the state of Utah, and

WHEREAS, Brush has been in continuous operation as a business entity for the last five years; and

WHEREAS, Brush meets financial criteria for self bonding (as shown in the ~~attached~~ <sup>attached</sup> financial sheet); and (see Self Bonding Qualification Sheet with Exhibit "B" through "E" attached hereto.)

WHEREAS, Brush has submitted to the Division of Oil, Gas and Mining and Board financial statements which are accompanied by an audit opinion prepared by Ernst & Whinney Brush Wellman Inc. as contained in the 1987 Annual Report (Exhibit "B" to (Accountant's Name) Self Bonding Qualifications Sheet.)

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, Brush does hereby agree to be held and bonds to the Board for the sum of \$311,300 for the timely performance of reclamation responsibilities for Topaz Mine, Permit No. M/023/003 in lawful money of the United States. By the submission of this Agreement, Brush will and truly binds itself, its successors and assigns, jointly and severally, by these presents.

The conditions of the above obligations are such that:

1. Brush shall perform all duties and fulfill all requirements applicable to reclamation as set forth in the Act, the regulations adopted pursuant to

the Act and the conditions of the permit to conduct  
open-pit beryllium mining operations, Permit  
No. M/023/003 issued by the Division.

2. The liability <sup>of Brush</sup> under the Agreement is conditioned upon  
successful reclamation of the permit area as provided in  
the reclamation plan for Permit No. M/023/003 for a  
period of time and in the manner specified in the Act,  
regulations adopted pursuant thereto, and the conditions  
set forth in Permit No. M/023/003 issued by the  
Division. At no time shall the liability or responsibility  
of Brush hereunder exceed the sum  
of \$311,300. Provided, however, that  
the Board may adjust the amount of liability hereunder as  
provided in Section 6 hereof.

3. Brush does hereby agree to  
indemnify and hold the Board harmless from any claim,  
demand, liability costs, charge or suit brought by a third  
party, as a result of Brush's  
failure to abide by the terms and conditions of the  
Reclamation Plan as set forth in the mining Permit  
No. M/023/003 and from any failure to comply with the  
terms of the Agreement.

4. The Board shall give Brush, or its  
designated agent herein, notice of any claim and any legal  
proceedings within the scope of the indemnity set forth at  
Section 3.

5. Upon successful completion of part or all of the obligations secured hereby, Brush may petition the Board for a final release of part or all of the obligations under this Agreement. Upon such petition, the Division of Oil, Gas and Mining shall conduct an inspection to ascertain whether duties and obligations of Brush under the Act, regulations adopted pursuant thereto and Permit No. M/023/003 have been fulfilled. If such duties and obligations have been fulfilled, the Board shall release Brush from part or all of its obligations under this Agreement and shall file a notice of such release in the property records of Juab County, Utah.
6. This Agreement shall be reviewed periodically by the Division of Oil, Gas and Mining, or reviewed upon petition by Brush in accordance with the Act and implementing regulations and the amount of liability under this Agreement may be adjusted if the Division determines that the cost of future reclamation has materially changed.
7. This Agreement may be terminated upon 90 days prior written notice to the Board if terminated by Brush or upon 90 days prior written notice to Brush if terminated by the Board.

Chairman  
Board of Oil, Gas and Mining

Date \_\_\_\_\_

By \_\_\_\_\_  
Gregory P. Williams

APPROVED AS TO FORM:

\_\_\_\_\_  
Assistant Attorney General

STATE OF Ohio )  
COUNTY OF Cuyahoga ) ss:

On the 9th day of January, 1989, personally appeared  
before me C. G. Waite and M. C. Hasychak who  
being by me duly sworn did say that he/she, the said \_\_\_\_\_  
C. G. Waite is the Vice President & Chief Financial Officer of  
Brush Wellman Inc. and said M. C. Hasychak is  
the Ass't Treas. & Ass't Secy of Brush Wellman Inc.  
and said instrument was signed in behalf of said corporation by  
authority of its bylaws or a resolution of its board of directors  
and said C. G. Waite and M. C. Hasychak duly  
acknowledged to me that said corporation executed the same.

Diane M. Barben  
Notary Public

SEAL

DIANE M. BARBEN  
Notary Public, State of Ohio  
Recorded in Cuyahoga County  
My Comm. Expires 10-23-90

**Section III**

**Solid Waste Annual Landfill Report  
2002**

**Mail to:**

Dennis R. Downs, Director  
Division of Solid and Hazardous Waste  
P.O. Box 144880  
Salt Lake City, Utah 84114-4880

Date Entered: \_\_\_\_\_

**SOLID WASTE LANDFILL ANNUAL REPORT****Part I - General Information**

**Administrative Information** Please enter the information requested in the space provided below, including the name, title and telephone number of a contact person who can answer questions regarding this report.

Calendar or fiscal year of report: January 1 - December 31, 2001

If fiscal year, please provide period covered: From \_\_\_\_\_ To \_\_\_\_\_

Facility Name: Brush Resources Inc. - Mine LandfillFacility Mailing Address: P.O. Box 815

(Number &amp; Street, Box and/or Route)

City: Delta, State: Utah Zip Code: 84624**Facility Location**County: JuabT. 13S, R. 12W, Sec. 8, NE ¼ of NE ¼Lat. 39 ° 42 ' 35 "N, Long. 113 ° 12 ' 54 "WContact's Name: Dan Perry Phone No.: (435) 864-2701Title: Environmental Health and Safety ManagerContact's Mailing Address: P.O. Box 815 Delta, Utah 84624**Owner**Name: Brush Resources Inc. Phone No.: (435) 864-2701Mailing Address: P.O. Box 815

(Number &amp; Street, Box and/or Route)

City: Delta, State: Utah Zip Code: 84624**Operator**

Name: \_\_\_\_\_ Phone No.: ( ) \_\_\_\_\_

(if different from Owner above)

Mailing Address: \_\_\_\_\_

(Number &amp; Street, Box and/or Route)

City: \_\_\_\_\_, State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**Permit Information** To insure complete records and proper filing please complete the following.

Permit No.: PENDING

Permit Date: \_\_\_\_\_

(If permit was issued after 1988)

(Date permit was signed)

**Facility Type\***☐ Class I☒ Class IIIb☐ Class V☐ Class II☐ Class IVa☐ Class IIIa☐ Class IVb

## Facility Status

☒ Currently in Operation    ☐ Closed - Date: \_\_\_\_\_

(The "Closed - Date" is the date that the landfill final cover construction was completed and will become the date that the 30 year post-closure care period begins)

## Part II - Other Information

### Annual Disposal

Tons disposed in reporting period: <7.5 or cubic yards: \_\_\_\_\_

Tons per day: <0.02 Tons recycled: \_\_\_\_\_  
(Total tons divided by 365)

Disposal capacity remaining at the site using one or more of the following measures:

(Please base capacity on those provided to the Division of Air Quality if this estimate has been made)

Years: 20

Cubic Yards: \_\_\_\_\_

Acres: \_\_\_\_\_

Tons: \_\_\_\_\_

### Other Required Reports

**Financial Assurance:** Each facility must recalculate the cost of closure and post-closure care to account for inflation and design changes each year. The recalculation, along with proof that the new cost estimates are fully covered by the assurance mechanism currently being utilized, must be submitted. ***Brush Resources Inc. will submit this information upon permit issuance.***

**Note** Facilities using "Local Government Financial Test" must provide the information required in R315-309-3(7)(d)

**Ground Water Monitoring:** Each facility must submit a ground water monitoring report which contains water elevations, sampling results and statistical analyses, unless the facility has a ground water monitoring exemption or is a Class II landfill.

Please indicate if exempt from ground water monitoring: X

**Explosive Gas Monitoring:** A gas monitoring report must be included unless the facility is a Class II, IV landfill or has an exemption.

Please indicate if exempt from gas monitoring: X

**Training Report:** A report of all training programs or procedures completed by facility personnel during the year.

Signature: DM for Dan Perry

Date: 2-25-02

"Class I landfill" means a municipal landfill or a commercial landfill solely under contract with a local government taking municipal waste generated within the boundaries of the local government and receiving, on a yearly average, over 20 tons of solid waste per day.

"Class II landfill" means a municipal landfill or a commercial landfill solely under contract with a local government taking municipal waste generated within the boundaries of the local government and receiving, on a yearly average, 20 tons, or less, of solid waste per day.

"Class III Landfill" means a non-commercial landfill that is to receive only industrial solid waste, but excluding farms and ranches.  
Class IIIa may receive conditionally exempt small quantity generator waste, Class IIIb may not

"Class IV landfill" means a landfill that is to receive only construction/demolition waste, yard waste, inert waste, dead animals, or upon meeting the requirements of Subsection R315-320-3(9)(c), materials derived from used tires but excluding inert demolition waste used as fill material.  
Class IVa may receive conditionally exempt small quantity generator waste, Class IVb may not

"Class V landfill" means a commercial landfill which receives any nonhazardous solid waste for disposal. Class V landfill does not include a landfill that is solely under contract with a local government within the state to dispose of nonhazardous solid waste generated within the boundaries of the local government.